

LOG OF MEETING
DIRECTORATE FOR ENGINEERING SCIENCES

SUBJECT: Meetings for ASTM Subcommittee F15.09 on Home
Playground Equipment

DATE OF MEETING: March 5-6, 1997

PLACE: ASTM Headqtrs.
West Conchohocken, PA

LOG ENTRY SOURCE: Celestine Trainor, ESHF

DATE OF ENTRY: March 7, 1997

COMMISSION ATTENDEES: Celestine Trainor, ESHF *CT*

NON-COMMISSION ATTENDEES: Available upon receipt of meeting
minutes.

SUMMARY OF MEETING:

The Subcommittee Chair called the meeting to order. Self introductions were made. Minutes from the Dec. 3-4, 1996 meeting were approved with no changes.

The Chair asked if the CPSC had anything to report to the subcommittee. I reported that revisions to the CPSC Handbook for Public Play Equipment would be coming out for comment at the end of March or beginning of April. The Chair asked that the CPSC seriously consider changing the slope for stairways from $< 35^\circ$ to 50° , because it is very confusing to the general public and all the other standards recommend 50° . The Chair also pointed out that it was possible to have a stairway with tread $> 7"$ and vertical rise $< 9"$ and have a slope of 50° . The Chair stated that it had been her understanding back in the Fall that CPSC was going to make the change. But, more recently, CPSC decided not to make the change. She felt 50° was most appropriate. I told her I would bring this to the CPSC team's attention.

A member of the subcommittee made a suggestion that the December and March meetings be held in a warmer climate. The ASTM representative Kathie Morgan agreed to look into making those arrangements.

The next order of business was to address negatives received from the last ballot.

Item 1: Guardrails/Protective Barriers

The group discussed the guardrails/protective barriers heights that are based on anthropometric data and that the younger user is most at risk, therefore, the rails/barriers should be in alignment with center of gravity for the younger child. The first two negative voters agreed to withdraw their negatives. The other 3 negative votes were ruled non-persuasive because in a separate meeting with CPSC and members of the

Subcommittee it was agreed that 25" high guardrails/protective barriers would be required for platforms 30" to 48".

Item #2: Equipment 20" in height or less is exempt from the requirements of section 8.1.2.

The discussion centered around finding a reasonable height. It was decided that 20" is reasonable based on furniture and other household items which children interact with on a regular basis. The group acknowledged that child could get hurt falling off something 20" or less, but they can also get hurt falling from a standing position. Also, the standard requires that the maintenance instructions state that play equipment should not be used on concrete, and other hard surfaces. Therefore, exempting these items from protective resilient surfacing does not mean it can be used on concrete (this was suggested in some of the negative votes).

The group also discussed the fact that consumers are not going to buy a \$25.00 plastic rocking horse or teeter/totter rocker that can be used anywhere and then install hundreds of dollars of surfacing.

The committee wanted to know if the CPSC would come out and say that this 20" or less exemption was okay, rather than not saying anything. I explained that CPSC staff does have some concerns with the exemption, but can not offer an alternative. I explained it was very doubtful that the CPSC would say this was okay.

The four negative votes were ruled non-persuasive because some reasonable guidance needs to be issued. Also, the maintenance instructions provide reasonable guidance.

Item #3: Definition of Platform

Three of the four negative votes requested exemptions for transition areas/barriers/slides/steps & stairs. These comments were found to be persuasive and the group agreed to address the exemptions under New Business.

The fourth negative requested a different definition of platform. This was ruled non-persuasive. This respondent had a second part to his comment, requesting clarification about steps and stairs vs. platforms. This was similar to the other three negatives, so it was ruled persuasive to be covered under New Business.

Item #4: Definition of Protective Barrier

The four negative votes requested clarification of the definition. All were ruled persuasive and will be addressed in New Business.

Item #5: Definition of Guardrail

Four of the seven negatives votes were ruled persuasive for the same reasons as Item #4; they were addressed in New Business. The other two negatives were ruled non-persuasive. The last negative was considered editorial.

Item #6: Definition of Rungs

The only negative wanted to add a performance requirement to the definition. It was ruled non-persuasive because it was inappropriate for the definition. It would be considered as a performance issue under future business.

New Business:

1. Definitions of Guardrail and Protective Barrier were discussed. The new definitions will read:

Guardrail - A guardrail is a device around an elevated surface that prevents inadvertent falls from the elevated surface. A guardrail must be designed to discourage climbing and must have a surface less than 3" wide having greater than a 30 degree angle from horizontal.

Protective Barrier - A protective barrier is an enclosure around an elevated surface that prevents both inadvertent and deliberate attempts to pass through the device. A protective barrier must be designed to discourage climbing and must have a surface less than 3" wide having greater than a 30 degree angle from horizontal.

2. Platforms 30" to 48"

25" high guardrails and protective surfacing will be required for platforms 30" to 48" high.

3. Ropes

CPSC was asked to provide data (injuries/deaths) on ropes on playground equipment.

4. Stairs/Step Ladders/Rung Ladders

Much discussion was held on use of guardrails, barriers, or handrails for stairs, step ladders and vertical ladders. It was proposed that for stairs with <50 degree slope a guardrail of 25" high will be used when surface tread heights are 30" to 48". Barriers of 27" high will be used when surface tread height are 48" to 72". Barriers of 33" high will be used when surface tread heights are >72".

Handrails are not needed on rung ladders because kids use rungs as hand-grip components. However, a recommendation for a

hand-hold, such as a hand loop, to be provided to help with egress/access is needed. Children need a means of support when going from climbing position to standing position. There was much discussion on this issue but no resolution. CPSC will check the COMSIS report for rationale for hand-grip components at transition areas from climbers to platforms.

5. Multiple Occupancy Swings

CPSC please provide spacing recommendations.

6. Dates for next meetings

June 17: 9-4

June 18: 8-12

Sept 16: 9-4

Sept 17: 9-12

The meeting adjourned at noon.

cc: John Preston, ES
Scott Heh, ESME
Mark Kumagai, ESME
Colin Church, EXHR
OS (2)
ES
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